File Code: 3410 (NA-03-10) **Date:** May 22, 2003

Subject: Spring Oak Defoliators

To: Mary O'Brien Reddan, Forest Supervisor

Wayne National Forest

On a recent visit to the Ironton Ranger District, FHP personnel documented extensive defoliation of oaks by a complex of spring feeding caterpillars along the Telegraph Road. After contacting the Ohio DNR Division of Forestry, we were informed that they have received numerous calls inquiring about white oak defoliation in southern Ohio. The defoliation appears to be

widespread and locally heavy. Reports of defoliation have come in from Scioto, Athens, Vinton, Pike, and Lawrence Counties. Last year, forest tent caterpillars (Fig. 1), followed by the common oak moth (Fig. 2) and a noctuid named *Phoberia atomeris*, were given credit for oak defoliation in southern Ohio. We have observed a similar complex of lepidopterans active on the Forest with the addition of a geometrid named *Phigalia titea* (Fig. 3). These are native insects that hatch when bud break occurs; the larvae feed on the expanding foliage for up to six weeks with one generation per year. The defoliation observed was having quite an impact on the oaks, to the extent that we expect some may have to refoliate. Since many of these trees have been damaged



by this spring's ice storm, it is likely this additional stressor will have a negative impact on these trees, and developing seedlings (Fig. 4).



Figure 1. Forest tent caterpillar



Figure 2. Common oak moth*

As far as treatment and control, native predators and parasites usually keep these caterpillars in check, except during periodic outbreaks. There is no chance to treat these insects this year for several reasons: the majority of the defoliation has already occurred, the larvae are already in late instars, there is no current categorical exclusion for "emergency" treatment for insect outbreaks, and the low national priority for funding native insect outbreaks unless an outbreak is associated





with a high-value resource. With the exception of the forest tent caterpillar, effective monitoring systems have not been developed and little is known about the factors that control the population dynamics of these species. The only thing to do is to document the extent of the defoliation and monitor the populations the best we can for next year.





Figure 3. The eastern oak looper, *Phigalia titea*

Figure 4. Oak seedling defoliation

We ask that all field personnel continue to monitor for evidence of defoliation, discoloration, and mortality in their areas and take notes on the location, type of damage, and potential agents responsible by taking photographs or sending samples. Any evidence can be reported to the Morgantown Field Office, either by email, phone, or online using the forest insect and disease link on the forest intranet site. If you have any further questions on this or any other insect issue, feel free to contact Rick Turcotte at (304) 285-1544.

Sincerely,

JOHN W. HAZEL Field Representative Forest Health Protection Enclosures

Cc:

District Ranger, Ironton RD District Ranger, Athens RD District Ranger, Marietta Unit

RMT

* Photo courtesy of Ohio DNR